

IN THE TITLE:

C²
Please delete the title and substitute therefor ~~TRANSGENIC MICE CONTAINING~~
REGULATORY SEQUENCES OF THE β 2-SUBUNIT OF THE NEURONAL NICOTINIC
ACETYLCHOLINE RECEPTOR.

IN THE SPECIFICATION:

Page 3, line 13, after "pp. 413-429", insert --May 1991--.

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IN THE CLAIMS:

Please replace claims 43 and 44 with the following claims:

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Sub E2
43. (Amended) A transgenic mouse as claimed in claim 41, wherein the DNA of the
second mouse is not identical to the DNA of the first mouse.

44. (Amended) A transgenic mouse as claimed in claim 43, wherein the second mouse is
a transgenic mouse containing a DNA sequence different from the DNA sequence of the first
mouse.

Please add the following new claims:

C⁴
--48. (New) The transgenic mouse as claimed in claim 40, wherein the heterologous
protein is a toxin.

49. (New) The transgenic mouse as claimed in claim 40, wherein the heterologous
protein is a growth factor.

50. (New) The transgenic mouse as claimed in claim 40, wherein the heterologous
protein is an oncogenic, tumorigenic, or immortalizing protein.

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51. (New) The process according to claim 46, wherein the nucleotide sequence encoding the heterologous protein is a reporter gene.

52. (New) The process according to claim 51, wherein the reporter gene encodes luciferase or β -galactosidase.

53. The process according to claim 46, wherein the DNA sequence is transferred to the neuronal host cell *in vitro*.

54. (New) The process according to claim 53, wherein the heterologous polypeptide is a toxin, a growth factor, or an oncogenic, tumorigenic, or immortalizing protein.

55. (New) A process for producing a neuronal host cell that expresses a heterologous protein, comprising:

introducing a DNA sequence into a mouse at an embryonic stage, wherein the DNA sequence comprises a promoter of the $\beta 2$ -subunit of neuronal nicotinic acetylcholine receptor having the sequence from about nucleotide -1125 to about nucleotide +38 as set forth in Figure 1 (SEQ ID NO. 22) operatively linked to a nucleotide sequence encoding the heterologous polypeptide; and

generating a transgenic mouse all of whose germ cells and somatic cells contain the DNA sequence and wherein the neurons of the transgenic mouse express the heterologous polypeptide.

56. (New) The process according to claim 55, wherein the nucleotide sequence encoding the heterologous protein is a reporter gene.

57. (New) The process according to claim 56, wherein the reporter gene encodes luciferase or β -galactosidase.

CH Sub 65 58 (New) The process according to claim 55, wherein the heterologous polypeptide is a toxin, a growth factor, or an oncogenic, tumorigenic, or immortalizing protein.--

REMARKS

Applicants respectfully request reconsideration of this application in view of the following remarks.

Claims 43 and 44 have been amended. Claims 48-58 have been added. Claims 40-58 are currently pending in this application.

Claim 44 was amended by replacing the phrase "containing a different transgene than the first mouse" with "containing a DNA sequence different from the DNA sequence of the first mouse." Claim 44 was amended to further clarify that "a DNA sequence different from" refers to a DNA sequence other than the one recited in claim 41, i.e., "a DNA sequence comprising a promoter of the β 2-subunit of neuronal nicotinic acetylcholine receptor having the sequence from about nucleotide -1125 to about nucleotide +38 as set forth in Figure 1 (SEQ ID NO. 22) operatively linked to a nucleotide sequence encoding a heterologous polypeptide." Therefore, the amendment to claim 44 does not narrow the scope of the claim. Claim 43 was amended to depend from claim 41 rather than claim 42. This amendment does not narrow the scope of claim 43.

Support for new claims 48-50 can be found throughout the specification, including, for example, at page 6, lines 6-20. Support for new claims 51-53 can be found throughout the specification, including, for example, at page 6, lines 6-20. Support for new claim 54 can be found throughout the specification, including, for example, at page 13, lines 14-25. Support for